QT036

Liquid Cooled Gas Engine Generator Sets

Standby Power Rating

36 kW 60 Hz

GENERAC 2.4L ENGINE

Turbcharged/Aftercooled
Gaseous Fueled

STANDARD EQUIPMENT

- All input connections in one single area
- High coolant temperature shutdown
- Low oil pressure shutdown
- Low coolant level automatic shutdown
- Overspeed automatic shutdown
- Crank timer
- Exercise timer
- Oil drain extension
- Cool flow radiator
- Closed coolant recovery system
- UV/Ozone resistant hoses
- Watertight state of the art electrical connectors
- Mainline circuit breaker
- Radiator drain extension
- Battery charge alternator
- 2 Amp static battery charger
- Battery cables
- Battery rack
- Fan and belt guards
- Isochronous governor
- Flex fuel line
- Hour meter

FEATURES

- Innovative design and fully prototype tested
- UL2200 Listed
- Solid state frequency compensated voltage regulator
- Dynamic and static battery charger
- Sound attenuated acoustically designed enclosure
- Quiet test for low noise level exercise
- Acoustically designed engine cooling system
- High flow low noise factory engineered exhaust system
- State of the art digital control system with R100 digital control panel
- Watertight electrical connectors
- Rodent proof construction
- High efficiency, low distortion Generac designed alternator
- Vibration isolated from mounting base
- Matching Generac transfer switches engineered and tested to work as a system
- All components easily accessible for maintenance
- Electrostatically applied powder paint

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APPLICATION & ENGINEERING DATA

QT036

GENERATOR SPECIFICATIONS

TYPE	Synchronous
ROTOR INSULATION	Class H
STATOR INSULATION	Class H
TOTAL HARMONIC DISTORTION	<5%
TELEPHONE INTERFERENCE FACTOR (TIF)	<50
ALTERNATOR OUTPUT LEADS 3 PHASE	4 wire
BEARINGS	Sealed Ball
COUPLING	Flexible Disc
LOAD CAPACITY (STANDBY RATING)	36 kW
EXCITATION SYSTEM	Direct

NOTE: Generator rating and performance in accordance with ISO8528-5, BS5514, SAE J1349, ISO3046, and DIN6271 standards.

VOLTAGE REGULATOR

TYPE	Electronic
SENSING	Single Phase
REGULATION	± 1%
FEATURES	V/F Adjustable Adjustable Voltage and Gain LED Indicators

GENERATOR FEATURES

- ❒ Revolving field heavy duty generator
- ❒ Directly connected to the engine
- ❒ Operating temperature rise 120 °C above a 40 °C ambient
- ❒ Insulation is Class H rated at 150 °C rise
- ❒ All models are fully prototyped tested

CONTROL PANEL FEATURES

❒ SEVEN LED INDICATOR LIGHTS
- System ready
- Low fuel pressure
- Low battery
- Low oil pressure
- High coolant temp/low coolant temp
- Overspeed
- Overcrank

❒ ADDITIONAL FUNCTIONS
- Utility sensing
- Delay on utility failure for engine start
- Engine warm-up before transfer
- Delay to retransfer to utility
- Engine cooldown timer
- Exerciser not set
- Hour meter

❒ INTERNAL FUNCTIONS:
- 3 position switch (auto, off and manual)
- 2 wire start for any transfer switch
- Communicates with the Generac RTS transfer switch
- Built-in 7 day exerciser
- Selectable engine speed at exercise
- Governor controller is built into the master control board
- Temperature range -40 °C to 70 °C

ENGINE SPECIFICATIONS

MAKE	Generac
MODEL	Inline 4
CYLINDERS	4
DISPLACEMENT	2.4 Liter
BORE (inches)	3.41
STROKE (inches)	3.94
COMPRESSION RATIO	8.5:1
INTAKE AIR SYSTEM	Turbocharged/Aftercooled
VALVE SEATS	Hardened
LIFTER TYPE	Hydraulic

GOVERNOR SPECIFICATIONS

TYPE	Electronic
FREQUENCY REGULATION	Isochronous
STEADY STATE REGULATION	± 0.25
ADJUSTMENTS FOR:	
Speed	Yes
Droop	Yes

ENGINE LUBRICATION SYSTEM

OIL PUMP	Gear
OIL FILTER	Full flow spin-on cartridge
CRANKCASE CAPACITY	4 Quarts

ENGINE COOLING SYSTEM

TYPE	Closed
WATER PUMP	Belt driven
FAN SPEED	1050
FAN DIAMETER	22 inches
FAN MODE	Puller

FUEL SYSTEM

FUEL TYPE	Natural gas, propane vapor
CARBURETOR	Down Draft
SECONDARY FUEL REGULATOR	Standard
FUEL SHUT OFF SOLENOID	Standard
OPERATING FUEL PRESSURE	5" - 14" H_2O

ELECTRICAL SYSTEM

BATTERY CHARGE ALTERNATOR	12V 30 Amp
STATIC BATTERY CHARGER	2 Amp
RECOMMENDED BATTERY	Group 26, 525CCA
SYSTEM VOLTAGE	12 Volts

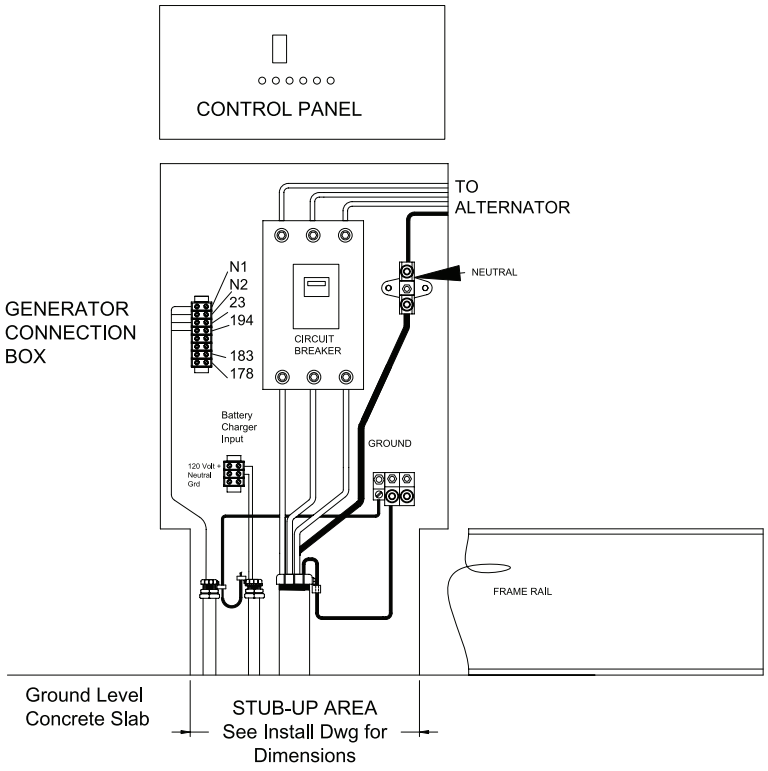
Rating definitions - Standby: Applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. (All ratings in accordance with BS5514, ISO3046, ISO8528 and DIN6271).

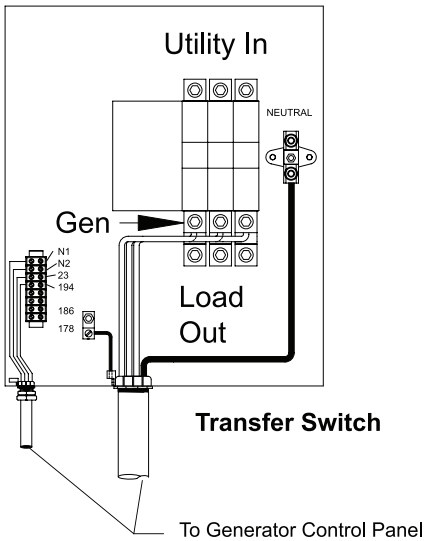
OPERATING DATA

	QT036				
kW RATING	36/35				
ENGINE SIZE	2.4 Liter Inline 4				
GENERATOR OUTPUT VOLTAGE/KW - 60Hz	**kW - LP**	**Amps**	**KW - NG**	**Amps**	**CB Size**
120/208V, 3-phase, 0.8 pf	36	125	35	121	150
120/240V, 3-phase, 0.8 pf	36	108	35	105	125
277/480V, 3-phase, 0.8 pf	36	54	35	52	60
GENERATOR LOCKED ROTOR KVA AVAILABLE @ VOLTAGE DIP OF 35%					
Single phase or 208 3-phase			63		
480V 3-phase			84		
ENGINE FUEL CONSUMPTION (Natural Gas) (Propane)	**Natural Gas**		**Propane**		
	(ft^3/hr.)		(gal/hr.)		cu ft/hr
Exercise cycle	87		0.96		35.2
25% of rated load	156		1.67		60.8
50% of rated load	282		3.0		110
75% of rated load	392		4.2		153
100% of rated load	503		5.4		196
ENGINE COOLING					
Air flow (inlet air including alternator and combustion air) ft^3/min.			2,200		
System coolant capacity US gal.			2.5		
Heat rejection to coolant BTU/hr.			135,000		
Max. operating air temp. on radiator °C (°F)			60 (150)		
Max. ambient temperature °C (°F)			50 (140)		
COMBUSTION AIR REQUIREMENTS					
Flow at rated power 60 Hz cfm			106		
SOUND EMISSIONS IN DBA					
Exercising at 7 meters			58		
Normal operation at 7 meters			64		
EXHAUST					
Exhaust flow at rated output 60 Hz cfm			300		
Exhaust temp. at muffler outlet °F			1075		
ENGINE PARAMETERS					
Rated synchronous RPM 60 Hz			1800		
HP at rated KW 60 Hz			56		
POWER ADJUSTMENT FOR AMBIENT CONDITIONS					
Temperature Deration					
3% for every 10 °C above - °C			25		
1.65% for every 10 °F above - °F			77		
Altitude Deration					
1% for every 100 m above - m			915		
3% for every 1000 ft. above - ft.			3000		

RATING: All three phase units are rated at 0.8 power factor. All single phase units are rated at 1.0 power factor. STANDBY RATING: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046-1. Design and specifications are subject to change without notice. KW rating is based on LPG Fuel and may derate with natural gas.

INTERCONNECTIONS



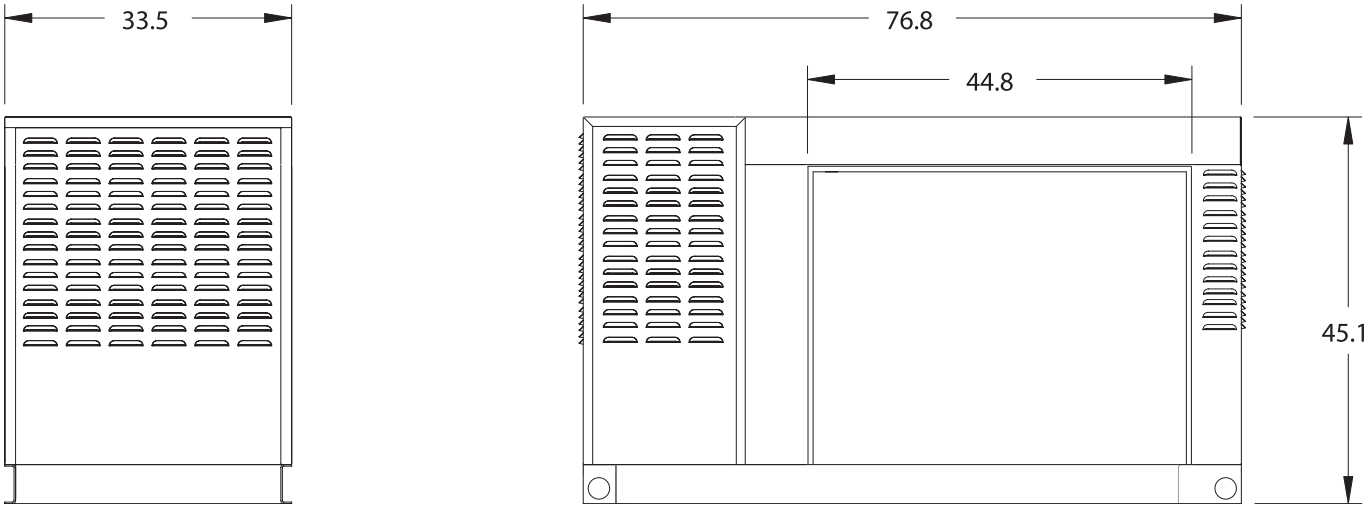


CIRCUIT BREAKER SIZE

kW	VOLTS	AMPS	LUG SIZE
36	240 1ø	175	#6 to 300 MCM
36	208 1ø	150	#6 to 300 MCM
36	240 3ø	125	#6 to 300 MCM
36	480 1ø	60	#6 to 300 MCM

Installation Drawing Ref. No. 0F6286

INSTALLATION LAYOUT



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